Appendix XVI - E
FDC Jan 2003

Attachment E: Proposed amendment to the chapter I.3. Disease of crustaceans: General Information in the *Diagnostic Manual for Aquatic Animal Diseases*

CHAPTER I.3.

GENERAL INFORMATION

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3. SAMPLING FOR DIAGNOSIS IN DISEASE SITUTAIONS

[There are at least three purposes for which crustacean stocks may be sampled with regard to the OIE listed crustacean pathogens. These are: 1) surveillance; 2) stock or facility 'certification'; and 3) disease diagnosis. The number and type of samples to be taken for analysis varies greatly according to which of these purposes applies.

3.1. Diagnosis in disease situations]

In clinical disease episodes, carefully selected quality specimens with representative lesions should be obtained from live or moribund crustaceans. Every effort should be made to sample those specimens for diagnosis that are representative of the disease(s) that is (are) affecting the crustacean stock of interest, and that are moribund or clinically diseased. Collection of dead specimens should be avoided. When cultured or wild crustacean stocks are presenting clinical signs of an active disease that are consistent with, or suggestive of, any one of the OIE listed crustacean diseases, care should be taken to ensure that the samples collected are preserved appropriately for the anticipated diagnostic tests (see sample preservation section for recommended methods).

The recommended minimum numbers of specimens to collect for diagnostic testing are 100 for the larval stages of most crustaceans; 50 for the postlarval stages; and 10 for juveniles and adults. Sample numbers may be greater if clinically diseased specimens are readily apparent and collected. Nonetheless, these recommended 'minimum' sample numbers are provided as guidelines, and it must be emphasised that carefully selected, quality specimens are far more valuable (and cost-effective) diagnostic specimens than dozens or hundreds of specimens taken at random to 'fill out' the sample.

[3.2. Diagnosis in asymptomatic crustaceans

When samples are to be taken for surveillance, for testing of asymptomatic carriers of previous disease epizootics, or for 'certification' of specific pathogen free (SPF) status, the sample size to be taken should be determined from a statistical table. The minimum sample size for each lot tested should provide a 95% level of confidence that infected specimens will be included in the sample, assuming a minimum prevalence of infection equal to or greater than 2%, 5%, or 10% (see Table 1 Chapter I.1.).

For surveillance and certification purposes for OIE listed diseases, the samples taken for diagnostic tests at any given aquaculture site or from wild stocks, should include the appropriate number of specimens from each lot to be tested according to Table 1 (Chapter I.1.). Testing for the lowest prevalence (2%) is recommended.

For the OIE listed diseases it is highly recommended that the scheduling of sampling be planned (i.e. by farm schedule, season, etc.) so that the particular life-stage(s) are sampled at a time when the pathogen of concern is most likely to be detected. This is especially important when the available diagnostic methods are dependent on simple microscopy or histological methods and do not include molecular methods. For the baculoviruses BP, MBV, and BMN, larval and early postlarval are the most appropriate samples; for TSV, WSSV and YHV, juveniles and subadults provide the best samples; and for crayfish plague, juveniles and adults are suitable samples.

For diagnosis of asymptomatic infections in stocks where OIE listed pathogens are likely to be present, the number of samples taken may reflect the assumption that prevalence will exceed 5% (Table 1 Chapter I.1.).]